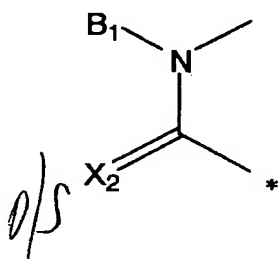


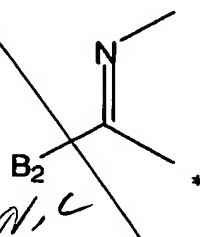
wherein Z represents a group of the following formula (Z1) or (Z2), which is bonded to the nitrogen atom at a symbol “*”.

A9

(Z1)



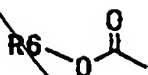
(Z2)



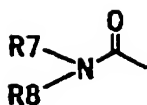
wherein B₁ represents hydrogen atom, a lower alkyl group which optionally contains a hetero atom in the chain thereof, a lower alkylcarbonyl group (only when L represents oxygen atom, Y represents an interatomic bond and E represents hydrogen atom), an aryl-lower alkyl group, a heteroaryl-lower alkyl group, a hydroxy-lower alkyl group, a halogeno-lower alkyl group, an amino-lower alkyl group, a carboxy-lower alkyl group, a lower alkyloxycarbonyl-lower alkyl group or a group of the following formula (3) or (4):

544-315
316
318
331
332
333
335

(3)



(4)



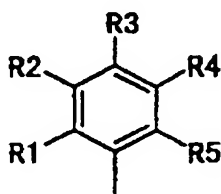
wherein R^6 to R^8 each represent hydrogen atom, a linear, branched or cyclic, saturated or unsaturated hydrocarbon group having 1 to 6 carbon atoms, a substituted or unsubstituted aryl group, a substituted or unsubstituted heteroaryl group, a hydroxy-lower alkyl group, a hydroxy-lower alkenyl group, a halogeno-lower alkyl group, a halogeno-lower alkenyl group, an amino-lower alkyl group, an amino-lower alkenyl group, a carboxy-lower alkyl group, a carboxy-lower alkenyl group, a substituted or unsubstituted aryl-lower alkyl group, a substituted or unsubstituted aryl-lower alkenyl group, a substituted or unsubstituted diaryl-lower alkyl group, a substituted or unsubstituted heteroaryl-lower alkyl group, a substituted or unsubstituted heteroaryl-lower alkenyl group, a cyano-lower alkyl group or a cyano-lower alkenyl group, and the chains of R^6 to R^8 optionally contain a hetero atom, with the proviso that when R^6 to R^8 each represent a linear, branched or cyclic, saturated or unsaturated hydrocarbon group having 1 to 6 carbon atoms, a substituted or unsubstituted aryl group, a hydroxy-lower alkyl group, a hydroxy-lower alkenyl group, a halogeno-lower alkyl group, a halogeno-lower alkenyl group, a carboxy-lower alkyl group, a carboxy-lower alkenyl group, a substituted or unsubstituted aryl-lower alkyl group, a substituted or unsubstituted aryl-lower alkenyl group, a substituted or unsubstituted heteroaryl-lower alkyl group or, a substituted or unsubstituted heteroaryl-lower alkenyl group, L must be oxygen atom, Y must be an interatomic bond and E must be hydrogen atom;

C1
cont
B₂ represents an amino group, a lower alkyl group which optionally contains a hetero atom in the chain thereof, a lower alkylamino group, a lower alkylthio group, an aryl-lower alkyl group, a heteroaryl-lower alkyl group, a hydroxy-lower alkyl group, a halogeno-lower alkyl group, a substituted or unsubstituted aryl group or a substituted or unsubstituted heteroaryl group;

X₂ represents oxygen atom or sulfur atom;

A represents a group of the following formula (2), or 1-naphthyl, 2-naphthyl, indole-2-yl, indole-3-yl, thiophene-3-yl, thiophene-2-yl, furan-3-yl, furan-2-yl, pyridine-4-yl, pyridine-3-yl or pyridine-2-yl group:

A9
(2)

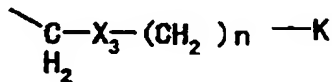


wherein R¹, R², R³, R⁴ and R⁵ may be the same or different from each other and each represent hydrogen atom, a halogen atom, hydroxyl group, carboxyl group, amino group, cyano group, nitro group, a lower alkyl group, a lower alkoxyl group, a lower alkylamino group, a lower alkylthio group, a lower alkanoyl group, a lower alkoxycarbonyl group, a hydroxy-lower alkyl group, a hydroxy-lower alkoxyl group, a hydroxy-lower alkenyl group, a halogeno-lower alkyl group, a halogeno-lower alkoxyl group, an amino-lower alkyl group, an amino-lower alkoxyl group, an amino-lower alkenyl group, a carboxy-lower alkyl group, a carboxy-lower alkoxyl group, a carboxy-lower alkenyl group, an aryl-lower alkoxyl group or an aroyl group,

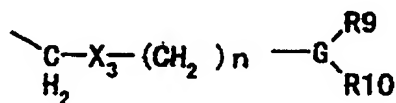
C' cont
C represents hydrogen atom, a lower alkyl group, a hydroxy-lower alkyl group, an aryl-lower alkyl group, a heteroaryl-lower alkyl group, an amino-lower alkyl group or a carboxy-lower alkyl group;

D represents hydrogen atom, a lower alkyl group, dimethoxymethyl group, cyano group, an aryl-lower alkyl group, a heteroaryl-lower alkyl group, a hydroxy-lower alkyl group, a halogeno-lower alkyl group, an amino-lower alkyl group, a carboxy-lower alkyl group or a group of the following formula (5) or (6):

A9
(5)



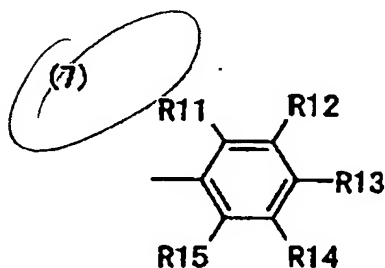
(6)



wherein X₃ represents O, S or N-R₈', n represents an integer of 0 to 6, K in general formula (5) represents hydrogen atom, a halogen atom, hydroxyl group, carboxyl group, amino group, cyano group, nitro group, azido group, a substituted or unsubstituted aryl group or a substituted or unsubstituted heteroaryl group, G in the formula (6) represents N or C-H, wherein R⁸ to R¹⁰ may be the same or different from each other, and they each represent hydrogen atom, a linear, branched or cyclic, saturated or unsaturated hydrocarbon group having 1 to 6 carbon atoms, a substituted or unsubstituted aryl group, a substituted or unsubstituted heteroaryl group, a hydroxy-lower alkyl group, a hydroxy-lower alkenyl group, a halogeno-lower alkyl group, a halogeno-lower alkenyl group, an amino-lower alkyl group, an amino-lower alkenyl group, a carboxy-lower alkyl group, a carboxy-lower alkenyl group, an aryl-lower alkyl group, an aryl-lower alkenyl group, a heteroaryl-lower alkyl group, a

C1
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heteroaryl-lower alkenyl group, a cyano-lower alkyl group or a cyano-lower alkenyl group, and the chains may contain a hetero atom, or R^9 and R^{10} may together form a ring which may contain a hetero atom;

E represents hydrogen atom (only when L represents oxygen atom and Y represents an interatomic bond), a group of the following general formula (7), a substituted or unsubstituted heteroaryl group, cyclopentyl group, cyclohexyl group, pyrrolidinone-1-yl group or piperidinone-1-yl group, when E represents cyclopentyl group, cyclohexyl group, pyrrolidinone-1-yl group or piperidinane-1-yl group, Z is a group having the formula (Z_2):



wherein R^{11} , R^{12} , R^{13} , R^{14} and R^{15} may be the same or different from each other and each represent hydrogen atom, a halogen atom, hydroxyl group, carboxyl group, amino group, cyano group, nitro group, a lower alkyl group, a lower alkoxy group, a lower alkylamino group, a lower alkylthio group, a lower alkanoyl group, a hydroxy-lower alkyl group, a hydroxy-lower alkoxy group, a hydroxy-lower alkenyl group, a halogeno-lower alkyl group, a halogeno-lower alkoxy group, an amino-lower alkyl group, an amino-lower alkoxy group, an amino-lower alkenyl group, a carboxy-lower alkyl group, a carboxy-lower alkoxy group, a carboxy-lower alkenyl group, an aryl-lower alkyl group, an aryl-lower alkoxy group, a lower alkoxycarbonyl group, an aroyl group, a substituted or unsubstituted aryl group, a

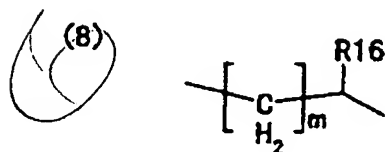
C1
cont
→
substituted or unsubstituted heteroaryl group or a saturated cyclic hydrocarbon having 3 to 8 carbon atoms, which may contain a hetero atom in the chain thereof and/or in the ring thereof,

X_1 represents an interatomic bond, $-CH_2-$, $-CH_2CH_2-$, $-CH=CH-$ or $-CC-$,

L represents $>N-F$ or oxygen atom (only when Z represents Z_1),

wherein F represents hydrogen atom or a lower alkyl group which may contain a hetero atom in the chain thereof, a hydroxy-lower alkyl group, an amino-lower alkyl group, a carboxy-lower alkyl group or a lower alkyloxycarbonyl-lower alkyl group,

Y represents an interatomic bond (only when L represents oxygen atom and E represents hydrogen atom), a saturated or unsaturated linear hydrocarbon group having 1 to 6 carbon atoms, which may contain a hetero atom in the group thereof, or a group of the following formula (8):



wherein R_{16} represents hydrogen atom, a substituted or unsubstituted, saturated or unsaturated linear, branched or cyclic hydrocarbon group having 1 to 6 carbon atoms, a substituted or unsubstituted aryl group, a substituted or unsubstituted heteroaryl group, a hydroxy-lower alkyl group, a hydroxy-lower alkenyl group, a halogeno-lower alkyl group, a halogeno-lower alkenyl group, an amino-lower alkyl group, an amino-lower alkenyl group, a carboxy-lower alkyl group, a carboxy-lower alkenyl group, an aryl-lower alkyl group, an aryl-lower alkenyl group, a heteroaryl-lower alkyl group, a heteroaryl-lower alkenyl group, a cyano-lower alkyl